Supplementary Table 2. Summary of clinical, pathology and molecular review of mutation-negative serous carcinomas.

| Study ID | Cohort | Original Diagnosis | Pathology Review | Clinical Review | p53 Staining | Genomic Change | MDM2 Copy Number | MDM4 Copy Number | TP53 Copy Number | Tumour Content |
|-------------|------------|--|---|---|---|---------------------|------------------------|------------------------|------------------------|-------------------|
| 533 | Pilot | Stage IIIC, grade 2, papillary serous adenocarcinoma | Grade 2 with areas of grade 1 and co-existing borderline tumor | Age 22 yr at diagnosis, poor treatment response | Negative | 1p loss | | | | >90% |
| 22029 | Validation | Stage IV, grade 3, papillary serous adenocarcinoma | Original report confirmed | Pathogenic germline BRCA2 mutation | Heterogeneously positive (+ to +++) | Moderately aberrant | | Gain | | >70% |
| 23221 | Validation | Stage IIIC, grade 3, serous carcinoma | High-grade tumour of uncertain primary site (differential diagnosis; serous carcinoma, mesothelioma and gastrointestinal tract carcinoma) | Neoadjuvant chemotherapy, platinum-refractory | Negative (stromal cells occasional +) | Highly aberrant | | | | >60% |
| 41358 | Validation | Stage IIIC, grade 3, serous carcinoma | Original report confirmed | | 90% strongly positive $(+++)$ | Highly aberrant | | | Deletion | >60% |
| 60049 | Validation | Stage IIIC, grade 3, serous carcinoma | Original report confirmed | | Heterogeneously focal $(+$ to $+++)$ and 80% cytoplasmic $(+)$ | Highly aberrant | | Gain | Deletion | >60% |
| 60214 | Validation | Stage IIIC, grade 2, serous carcinoma | Grade 1 invasive | | 30% Positive (++) | Aneuploidy | | Gain | Deletion | >70% |
| 60258 | Validation | Stage IIIC, grade 3, papillary serous adenocarcinoma | Original report confirmed | | 90% strongly positive (+++) | Highly aberrant | Gain | Deletion | Deletion | >70% |